

REMARKS

In the Final Office Action of June 11, 2008, claims 1-4 and 9-12 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Application Number 2003/0179220 A1 (“Dietrich”) in view of U.S. Patent Number 6,567,095 (“Wood”). In addition, claims 5-8, 13 and 14 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Dietrich in view of Wood, U.S. Patent Application Number 2001/0012018 A1 (“Hayhurst”), U.S. Patent Application Number 2001/0036307 A1 (“Hanna et al.”) and/or U.S. Patent Application Number 2003/0145008 A1 (“Burrell”).

In response, Applicants respectfully assert that the independent claims 1 and 9 are not obvious in view of Dietrich and Wood, as explained below. In view of the following remarks, Applicants respectfully request that the pending claims 1-14 be allowed.

Applicants note herein that claim 14 was indicated as being objected to in the Office Action Summary. However, the Office Action does not mention any objection to claim 14. Applicants will assume that the indication in the Office Action Summary is an error.

A. Patentability of Independent Claims 1 and 9

Claims 1 and 9 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Dietrich in view of Wood. However, it is not obvious to combine the teachings of Dietrich and Wood to derive the claimed invention of claims 1 and 9. As such, Applicants respectfully request that the independent claims 1 and 9 be allowed.

The Office Action on pages 4 and 5 states that the cited reference of Dietrich does not teach “for all N different views of said 3D images” and “according to one of

the N different views,” as recited in the independent claim 1. The Office Action then states that the cited reference of Wood teaches “for all N different views ,(Wood, Column 7, lines 45 to 49)of said 3D images,(Wood, Column 7, lines 59-61)” and “according to one of the N different views. ,(Wood, Column 7, lines 45 to 49).” The Office Action then alleges that “[i]t would have been obvious to one skilled in the art, at the time of the Applicant’s invention, to incorporate the teachings of Wood into the process taught by Dietrich, because through such incorporation would provide a stereoscopic image view.” Applicants respectfully disagree.

As a preliminary matter, Applicants note herein that, since the limitation of “for all N different views of said 3D images” describes an aspect of the claimed element “rasterizer,” the cited reference of Dietrich does not teach “a rasterizer for transversing a surface grid over a surface of primitives of said 3D images for all N different views of said 3D images.” Similarly, since the limitation of “according to one of the N different views” describes an aspect of the claimed element “N screen space resamplers,” the cited reference of Dietrich does not teach the “N screen space resamplers each for resampling the shaded color sample determined by said shader unit according to one of the N different views.”

As for the cited reference of Wood, Applicants respectfully note herein that it is not logical to assert that Wood teaches a prepositional phrase without any context. The cited reference of Wood in column 7, lines 59-65, which was partly cited for teaching “for all N different views of said 3D images,” states that “[t]o provide an optimum combination of quality and cost, the image sources 77,78 for the two center views V2,V3 are respective 3-D graphics renderers as in FIG. 1, and the other views, image sources 76,79 are merely post-processing stages coupled to respective ones of the renderers 77,78 and generating views by synthetic stereo.” In this cited passage of Wood, the views V2 and V3 are described with reference to 3-D graphics renderers, not a rasterizer of a renderer. Thus, the alleged teachings in the cited passage cannot be applied to a rasterizer of a renderer, which is only a part of the renderer. Furthermore, the fact that a plurality of 3-D graphics renderers are mentioned for the two views indicates that each view corresponds to a single 3-D graphics renderer. Thus, the cited passage teaches only a single view for a single 3-D graphics renderer, not multiple views for a single renderer. Thus, even if the teachings of this cited

passage of Wood is applied to the rasterizer of Dietrich, the resulting rasterizer would not be “*a rasterizer for transversing a surface grid over a surface of primitives of said 3D images for all N different views of said 3D images,*” as recited in the independent claim 1.

The cited reference of Wood in column 7, lines 45-50, which was partly cited for teaching “according to one of the N different views,” states that “the screen is an LCD device 72 with an overlying lenticular screen 74 with the arrangement of pixels driven from four different sources 76-79 relative to the individual lenticular arrays being such that, at viewing locations V1 to V4, the images from respective ones of the four sources 76-79 can be seen.” The viewing locations V1 to V4 in the cited passage are not disclosed as being related to any “*screen space resamplers each for resampling the shaded color sample determined by said shader unit,*” as recited in the independent claim 1. Thus, one of ordinary skill in the art would not apply the alleged teachings in this cited passage of Wood to any resamplers. Thus, it is not obvious to derive the claimed “*N screen space resamplers each for resampling the shaded color sample determined by said shader unit according to one of the N different views*” in view of the cited passage of Wood and the teachings of Dietrich.

For all the above reasons, the independent claim 1 is not obvious in view of the cited references of Dietrich and Wood. As such, Applicants respectfully request that the amended independent claim 1 be allowed.

The above remarks are also applicable to the independent claim 9, which recites limitations similar to those of the independent claim 1. Thus, the independent claim 9 is also not obvious in view of the cited references of Dietrich and Wood. As such, Applicants respectfully request that the independent claim 9 be allowed as well.

B. Patentability of Dependent Claims 2-8 and 10-14

Each of the dependent claims 2-8 and 10-14 depends on one of the independent claims 1 and 9. As such, these dependent claims include all the limitations of their respective base claims. Therefore, Applicants submit that these

dependent claims are allowable for at least the same reasons as their respective base claims. Thus, these dependent claims may be allowable for additional reasons.

As an example, the dependent claim 3 recites “*wherein a grid associated to one of the texture maps stored in the texture memory is chosen as said surface grid, if three requirements are fulfilled, said three requirements including: said texture map is addressed independently, said texture map is based on a 2D texture, and the texture coordinates at the vertices do not make up a degenerate primitive.*” The Office Action alleges on page 6 that the first and second requirements are found in column 6 of Wood and that the third requirement is found in column 1, where European patent application EP-A-0 438 195 is described. The cited reference of Wood fails to disclose that a grid is chosen if all three requirements are satisfied, especially in light of the fact that the third requirement is disclosed with respect to a prior art reference and not mentioned explicitly with the other two requirements. Thus, the dependent claim 3 is not obvious in view of Dietrich and Wood.

As another example, the dependent claim 4 recites “*the texture map with the largest area in texture space is chosen, if more than one texture maps stored in said texture memory fulfill said three requirements,*” which is not disclosed in the cited reference of Wood. The cited passage (column 6, lines 13-15) of Wood does mention the “largest (highest resolution) map.” However, the cited passage of Wood fails to disclose that the largest map is “*is chosen, if more than one texture maps stored in said texture memory fulfill said three requirements,*” as recited in the dependent claim 4. Thus, the dependent claim 4 is not obvious in view of Dietrich and Wood.

As another example, the dependent claim 5 recites in part “*a Z-stack constructor in which, from the at least one main view point Z-stack generated by the initial stage, **Z-stacks for additional viewpoints are constructed**, and a further image information occlusion semantics stage for generating image information from the z-stacks*” (emphasis added), which is not disclosed in the cited reference of Hayhurst. The cited passage (paragraph [0011]) of Hayhurst does not mention any Z-stacks for additional viewpoints. Thus, the dependent claim 5 is not obvious in view of Dietrich and Hayhurst.

Applicants respectfully request reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited.

Respectfully submitted,
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